

CLAIMS

1. Device for conditioning of nuclear fuel assemblies comprising an inner leak tight metallic receptacle for conditioning assemblies and an outer leak tight receptacle that may contain the inner receptacle, the outer leak tight receptacle at least including a bottom and an open end, such that when the inner receptacle is located in the outer receptacle, a passage remains free between the two receptacles, from the open end to the bottom of the outer receptacle, said passage including means for draining the outer receptacle and/or for controlling the leak tightness of the outer receptacle.

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2. Device according to claim 1 wherein the inner receptacle is adjusted in the outer receptacle.

3. Device according to claim 1 wherein the passage is a duct located in the inner receptacle leading to the outside.

4. Device according to claim 3, the inner receptacle and the duct of which are cylindrical-shaped with a circular cross section.

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5. Device according to claim 4, the duct of which is located on the centreline of the inner receptacle.

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6. Device according to claim 1 for which the inner receptacle is cylindrical-shaped and the outer receptacle comprises a protuberance delimiting said passage.

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7. Device according to claim 1 comprising a shielded plug that can be fixed in a leak tight manner to the open end of the inner receptacle and such that the passage passes through the plug.

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8. Device according to claim 7 comprising at least one closing plate that can be assembled such that the inner receptacle is leak tight.

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9. Device according claim 1 such that the outer receptacle comprises a leak tight cover and means for draining the outer receptacle and/or controlling its leak tightness, capable of facing the passage when the inner receptacle is placed in the outer receptacle.

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10. Device according to claim 1 comprising means for draining the outer receptacle including a dip tube.

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11. Device according to claim 1, the outer receptacle of which is a storage package for which the sidewalls are radiation shielding.

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12. Device according to claim 1 the outer receptacle of which is a leak tight metallic receptacle for conditioning of nuclear fuel assemblies.

13. Device according to claim 12 further comprising a transfer package for which the sidewalls are radiation shielding and capable of containing the outer receptacle.

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14. Method of conditioning nuclear fuel assemblies under water, comprising placement of the assemblies into the inner leak tight metallic receptacle of the device according to claim 1, the
10 device itself being located in the outer receptacle.

15. Method of conditioning nuclear fuel assemblies under water, including placement of the assemblies into the inner leak tight metallic
15 receptacle of the device according to claim 13, the device itself being located in the outer leak tight metallic receptacle that is itself located in the transfer package.

20 16. Method according to claim 15 in which a seal is used to ensure leak tightness between the outer receptacle and the transfer package.

17. Method of draining an outer receptacle
25 for radioactive material comprising insertion of an inner leak tight metallic receptacle into the outer receptacle, a passage remaining free between the two receptacles, confinement of the radioactive material in the inner leak tight receptacle, drainage of the outer
30 receptacle through the passage.

18. Method according to claim 17 for which the outer receptacle is drained through the same end of the outer receptacle as the confinement of the inner receptacle.

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19. Method according to claim 17, for which drainage is performed through a dip tube descending down to the bottom of the outer receptacle.

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20. Method according to claim 17, for which the confinement of the inner leak tight metallic receptacle is performed by welding of at least one closing plate.

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21. Method for double confinement of radioactive material including the drainage method according to claim 17, then confinement of the outer receptacle.

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22. Method according to claim 21, wherein the outer receptacle is an outer leak tight metallic receptacle the confinement of which is performed by welding of at least one closing plate.

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23. Method according to claim 22 wherein the outer receptacle is integrated to a transfer package with radiation shielding sidewalls.

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24. Metallic receptacle for conditioning nuclear fuel assemblies, comprising a non-removable bottom and an open end, and further comprising a duct

opening up in the non-removable bottom, said duct enabling drainage of an adjusted receptacle including it.